

REMARKS

Claims 1-4 and 6-28 are currently pending in the application. Claims 1 and 27 are independent claims.

The Examiner indicated that claims 2, 3, 4/2, 4/3, and 9 contain allowable subject matter. See Office Action, Page 2. Applicant appreciates the Examiner's early indication of allowable subject matter.

In light of the Amendment filed on February 19, 2003, the Examiner withdrew the restriction requirement set forth in the PTO communication dated January 29, 2002. See Office Action, page 2. Applicant notes with appreciation the Examiner's withdrawal of the restriction requirement.

In the Office Action, the Examiner rejected claims 1, 4/1, 6-8, and 27 under 35 U.S.C. §103(a) as being unpatentable over the admitted prior art ("APA") in view of Liebing (U.S. Patent No. 5,292,080) and rejected claims 10-26, and 28 under 35 U.S.C. §103(a) as being unpatentable over APA in view of Liebing and further in view of Wood (U.S. Patent No. 3,578,254).

Applicant respectfully traverses the rejections under 35 U.S.C. §103(a) because the Examiner has failed to establish a *prima facie* case of obviousness.

First, the Examiner may not rely on Liebing because it is not analogous prior art. The Examiner asserted that Liebing is analogous art to APA because both are centrifugal crushers. See Office Action, page 2. Applicant respectfully traverses this assertion by the Examiner. Contrary to the Examiner's assertion, Liebing is not analogous prior art because it is neither in the field of Applicant's endeavor nor

reasonably pertinent to the particular problem with which the present invention was concerned. See M.P.E.P. § 2141.01(a)

As described and claimed in this application, Applicant's field of endeavor concerns a rock crusher. In contrast, the field of endeavor in Liebing is an impact mill, "employed for crushing tasks or only as impact dehullers to separate brittle shells, such as the shells of soybeans or cocoa beans and of other husk fruits, or, in general terms, to separate the seeds from the kernels." Col. 1, lines 11-15. Liebing therefore is not related to Applicant's field of endeavor, namely rock crushing.

Furthermore, Liebing is not pertinent to the problem with which Applicant's invention was concerned. The invention in Liebing is described to obviate the problem of an irregular wear of an impact body. See col. 1, lines 51-55. Liebing describes that an impact mill can be rendered more economical by providing a uniform and regular wear of an impact body. See col. 1, line 56 through col. 2, line 6. In contrast, Applicant's invention obviates the problems associated with rock product control. Accordingly, in addition to not being related to Applicant's field of endeavor, Liebing is not pertinent to the problem with which Applicant's invention was concerned.

For at least these reasons, Liebing is not analogous prior art. The Examiner therefore may not rely on it as a reference under 35 U.S.C. §103(a).

Second, assuming *arguendo*, Liebing can somehow be considered analogous prior art, the Examiner still has failed to establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), each of three requirements must be met. First, the references, taken alone or combined, must teach

or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03.

Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of these requirements must “be found in the prior art, and not be based on applicant’s disclosure.” M.P.E.P. § 2143.

For example, neither APA nor Liebing discloses or suggests a rotary impact rock crusher for crushing rocks including, among other things, “a rotor . . . configured to receive the rocks thereinto and to eject the rocks outwardly therefrom . . . , wherein an angle of the rotor with respect to a vertical direction is adjustable,” as recited in independent claim 1.

As admitted by the Examiner, Applicant’s description in “BACKGROUND ART” does not disclose any rock crusher including a rotor whose angle with respect to a vertical direction is adjustable. See Office Action, page 2. Likewise, Liebing fails to disclose or suggest a rotor whose angle with respect to a vertical direction is adjustable.

Liebing discloses an impact mill including a distribution head 4 and a lid 2. The distribution head 4 includes discharge openings 10 for the raw material fed through an upper feeding pipe 5. See col. 2, lines 39-53. As shown in Fig. 1, however, the angle of the distribution head 4 with respect to a vertical direction is not adjustable. On the other hand, Liebing discloses that an impact body 17 of the lid 2 is inclined to form an angle alpha. See col. 2, lines 54-60. Liebing further discloses that “if impact rings of varying

heights . . . for different raw materials art to be employed, it may be desirable to make the angle alpha changeable.” Col. 3, line 68 through col. 4, line 3. Thus, while Liebing discloses that the angle alpha for the impact body 17 is changeable, it fails to disclose or suggest that the angle of the distribution head 4 with respect to a vertical direction is adjustable.

Accordingly, APA and Liebing, whether taken alone or in combination, fail to disclose or suggest each and every element recited in independent claim. For at least this reason, the Examiner still has failed to establish a *prima facie* case of obviousness regarding independent claim 1, even if Liebing somehow can be considered analogous prior art. For a similar reason, the Examiner also has failed to establish a *prima facie* case of obviousness regarding independent claim 27, even if Liebing somehow can be considered analogous prior art.

In addition, Applicant respectfully traverses the Examiner’s official notice that “forming a layer of material adjacent the mill interior surface for wear purposes is well known in the art and of no patentable merit.” Office Action, pages 2 and 3. Applicant therefore respectfully requests that the Examiner, in accordance with M.P.E.P. § 2144.03, produce an affidavit of personal knowledge or cite a supporting reference for the Examiner’s position that “forming a layer of material adjacent the mill interior surface for wear purposes is well known in the art” and would have been obvious to combine with the cited references.

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For at least the reasons explained above, independent claims 1 and 27 are in condition for allowance. Claims 2-4, 6-26, and 28 are also in condition for allowance at least by virtue of their dependency from respective allowable independent claims.

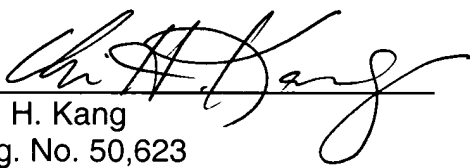
In view of the foregoing, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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